



GEOTECHNICAL &
ENVIRONMENTAL
SERVICES, INC.

June 7, 2000
Project No. 97664V3

Ms. Brenda Pohlmann
Nevada Division of Environmental Protection
555 E. Washington, Suite 4300
Las Vegas, NV 89101-1049

RE: *Results of monthly surface water sampling of the Las Vegas Wash at the Northshore Road bridge.*

PROVIDING

- Geotechnical Engineering
- Construction Materials Testing
- Environmental Site Assessments
- Drilling Services

Dear Ms. Pohlmann:

Per your request, Geotechnical & Environmental Services, Inc. (GES) obtained a surface water sample from the Las Vegas wash on May 30, 2000 near the Northshore Road Bridge. We sent this sample, under chain-of-custody protocol, to NEL Laboratories (NEL) for laboratory analysis of perchlorate. NEL's analysis revealed a perchlorate concentration of 740 micrograms per Liter ($\mu\text{g/L}$). The NEL report is included with this letter, along with the Perchlorate Summary Table for 2000.

Our services were performed using that degree of care and skill ordinarily exercised under similar circumstances by reputable engineering firms in this or similar localities. No other warranty, either express or implied, is included or intended in this report. We appreciate this opportunity to provide our services. If you have any questions regarding these results, please feel free to call us at 365-1001.

Sincerely,
Geotechnical & Environmental Services, Inc.

Daniel C. Burns, C.E.M.*
#1692 (Expires 10/07/2001)
Project Manager

Gregory P. DeSart, P.E., C.E.M.
#1172 (Expires 12/22/2000)
President

* "I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all applicable federal, state and local statutes, regulations and ordinances."

dlr

Enc: 2000 Perchlorate Summary Table
NEL Analytical Report

Dist: 1 faxed to addressee at 486-2863
1 original mailed to addressee
cc: fax to Jeff Gibson, American Pacific Corporation
cc: mail to Kevin Mayer, USEPA SFD 72, 75 Hawthorne Street, San Francisco, CA 94105
cc: to project file 97664V3

7560 W. Sahara Ave., Suite 101 Las Vegas, NV 89117
(702) 365-1001 • Fax (702) 341-7120
www.gesnevada.com

**Las Vegas Wash at Northshore Road Bridge
2000 Summary of Perchlorate Concentrations**

Date Sampled	Perchlorate (µg/L)
1/27/00	569
2/28/00	720
3/29/00	870
4/27/00	750
5/30/00	740

NEL LABORATORIESReno • Las Vegas
Phoenix • So. CaliforniaLas Vegas Division
4208 Arcata Way, Suite A • Las Vegas, NV 89030
(702) 657-1010 • Fax: (702) 657-1577
1-888-368-3282

CLIENT: Geotechnical & Env. Serv.
7560 West Sahara Ave. #101
Las Vegas, NV 89117

ATTN: Dan Burns

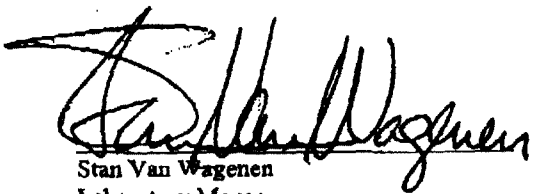
PROJECT NAME: FPF/97664 V3
PROJECT NUMBER: 97664 V3

NEL ORDER ID: L0005288

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 5/30/00.

Should you have any questions or comments, please feel free to contact our Client Services department at (702) 657-1010.


Stan Van Wagenen
Laboratory Manager


Date

CERTIFICATIONS:

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	<u>Reno</u>	<u>Las Vegas</u>	<u>S. California</u>
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT: Geotechnical & Env. Serv.
PROJECT ID: FPF/97664 V3
PROJECT #: 97664 V3

CLIENT ID: North Shore Road Bridge
DATE SAMPLED: 5/29/00
NEL SAMPLE ID: L0005288-01

TEST: Inorganic Non-Metals
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Perchlorate	740	80.	20	CA DHSM - 1C	µg/L	6/5/00

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: Geotechnical & Env. Serv.
PROJECT ID: FPF/97664 V3
PROJECT #: 97664 V3
TEST: Non-Metals

CLIENT ID: Method Blank
DATE SAMPLED: NA
NEL SAMPLE ID: 000605CLO4B-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Perchlorate	ND	4	1	CA DHSM - IC	µg/L	6/5/00

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

Reno • Las Vegas • Boise
Phoenix • So. California

Las Vegas Division • 4208 Arcata Way, Ste. A • Las Vegas, NV 89030
702-657-1010 • Fax: 702-657-1577 • 888-368-3282

Customer: **DES**
Attention: **D. Burns**

Address: **2560 West Sahara Ave, #101**

City: **Las Vegas, NV** Zip: **89117**

Phone Number: **702-365-1001** Fax Number: **702-364-7170**

Billing Address: **6/6** Expected Dye Date:

Requested Turnaround: ☒ 5-day ☐ 2-day ☐ 1-day ☐ Other

Time/Date Sampled: **1200/5-29-00** Customer Sample Identification: **North Shore Road Bridge** NEL Identification: **01**

of Containers: **1** Matrix (Box #1): **PER** Preservative (Box #2): **EX**

Analysis: **Perchlorate**

Remarks:

Condition when received: **Temp. 11°C**

Custody Seal Intact? **Y** **NONE**

Refused by (Print): **Richard Cottle** (Signature): **Richard Cottle** Date/Time: **5-30-00/1440**

Refused by (Print): **Richard Cottle** (Signature): **Richard Cottle** Date/Time: **5-30-00/1440**

Refused by (Print): **Richard Cottle** (Signature): **Richard Cottle** Date/Time: **5-30-00/1440**

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Refused by (Print): **Richard Cottle** (Signature): **Richard Cottle** Date/Time: **5-30-00/1440**

Refused by (Print): **Richard Cottle** (Signature): **Richard Cottle** Date/Time: **5-30-00/1440**

Project Name: **EPF** Project Number: **9766443**
Purchase Order Number: **1702** Sampled By: **R. Cottle**

CHAIN OF CUSTODY

NEL Work Order: **10005288**

Box #1
Dry - Drinking Water
WV - Waste Water
DC - Discharge Liquid
SD - Solid
AQ - Aqueous
A - Air

Box #2
A - HCl
B - HNO₃
C - H₂SO₄
D - NaOH
E - Iaa Only
F - Other
G - Not Preserved

The liability of NEL Laboratories Inc. is limited strictly to the price of sample analysis for those samples received in good condition by NEL. NEL is not responsible for loss, damage, resampling costs and/or qualified data related to samples not received in good condition, including adequate sample volume and number of containers. Customer signature of this CoC constitutes acceptance of all NEL Standard Terms and Conditions. Signature also constitutes acceptance of NEL Standard Test Prices for all services ordered here on, except those specified otherwise via an NEL Quotation for Testing Services in effect at the time of sample receipt. NEL turnaround times are measured in regular working days. Samples received at the laboratory after 16:30 will be considered received on the next working day. Commitment of laboratory to the requested turnaround time will be confirmed via Sample Confirmation transmitted to the fax number provided above.